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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/532,837	03/21/2000	William T. Clark	M0506/7021	7155
75	590 06/05/2002			
Gary S Engelson Wolf Greenfield & Sacks PC 600 Atlantic Avenue			EXAMINER	
			NGUYEN, CHAU N	
Boston, MA 02210-2211			ART UNIT	PAPER NUMBER
	•		2831	
			DATE MAILED: 06/05/2002	13

Please find below and/or attached an Office communication concerning this application or proceeding.

· · · · · · · · · · · · · · · · · · ·		NC.
	Application No.	Applicant(s)
	09/532,837	CLARK ET AL.
Office Action Summary	Examiner	Art Unit
	Chau N Nguyen	2831
The MAILING DATE of this communic Period for Reply	cation appears on the cover sheet	t with the correspondence address
A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNION.  - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this communion.  - If the period for reply specified above is less than thirty (30).  - If NO period for reply is specified above, the maximum statence of the second of the s	CATION.  of 37 CFR 1.136(a). In no event, however, may unication.  or days, a reply within the statutory minimum of tutory period will apply and will expire SIX (6) N  vill, by statute, cause the application to become	y a reply be timely filed  fthirty (30) days will be considered timely.  MONTHS from the mailing date of this communication.  BERNANDONED (35 U.S.C. § 133).
1) Responsive to communication(s) file	ed on <u>29 <i>April 2002</i></u> .	
2a) ☐ This action is <b>FINAL</b> . 2	2b)⊠ This action is non-final.	
closed in accordance with the practi		matters, prosecution as to the merits is C.D. 11, 453 O.G. 213.
Disposition of Claims		
4)⊠ Claim(s) <u>19-23 and 25-31</u> is/are pen		
4a) Of the above claim(s) is/ard	e withdrawn from consideration.	
5) Claim(s) is/are allowed.		
6) Claim(s) <u>19,20,22,23,25,27 and 29-3</u>		
7)⊠ Claim(s) <u>21,26 and 28</u> is/are objected	d to.	
8) Claim(s) are subject to restrict Application Papers	tion and/or election requirement.	
9)☐ The specification is objected to by the	Examiner.	
10) The drawing(s) filed on is/are:	a)☐ accepted or b)☐ objected to <b>t</b>	by the Examiner.
Applicant may not request that any obje	ection to the drawing(s) be held in ab	peyance. See 37 CFR 1.85(a).
11) The proposed drawing correction filed	on is: a) approved b)	disapproved by the Examiner.
If approved, corrected drawings are req	uired in reply to this Office action.	
12)☐ The oath or declaration is objected to	by the Examiner.	
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim	for foreign priority under 35 U.S.	C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:		
1. Certified copies of the priority of	documents have been received.	
2. Certified copies of the priority of	documents have been received in	n Application No
<ul><li>3. Copies of the certified copies of application from the Internation</li><li>* See the attached detailed Office action</li></ul>	ational Bureau (PCT Rule 17.2(a	)).
14)☐ Acknowledgment is made of a claim fo	or domestic priority under 35 U.S.	.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign land		
Attachment(s)	, , ,	
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PT 3) Information Disclosure Statement(s) (PTO-1449) Pa	ΓΟ-948) 5) ☐ Notice	iew Summary (PTO-413) Paper No(s) e of Informal Patent Application (PTO-152)
S. Patent and Trademark Office PTO-326 (Rev. 04-01)	Office Action Summary	Part of Paper No. 13

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#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 19, 20, 22, 25, 27, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bleich et al. (5,576,515) in view of Gaeris et al. (5,789,711).

Bleich et al. discloses an unshielded data cable comprising a plurality of twisted pairs of conductors and a non-conductive outer jacket, wherein the cable does not include a shield that encloses any of the conductors.

Bleich et al. does not disclose a non-conductive central core having a surface that defines channels within which the pairs are individually disposed.

Gaeris et al. discloses a cable comprising a non-conductive central core having a surface that defines channels within which a plurality of pairs are individually disposed, the core comprising a plurality of fins extending outwardly from the center of the core to at least an outer boundary defined by an outer

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dimension of the pairs, each fin extending from the center of the core at substantially right angle to the other fins, the plurality of channels being defined by the plurality of fins, and the plurality of fins positioning the plurality of twisted pairs in a substantially 90° relationship. Gaeris et al. also discloses the central core comprising a cavity in which a drain wire (col. 4, line 65) is disposed.

It would have been obvious to one skilled in the art to include the non-conductive central core as taught by Gaeris et al. into the cable of Bleich et al. to separate the pairs from each other to reduce cross-talk among the pairs as taught by Gaeris et al.

3. Claims 23 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bleich et al. in view of Gaeris et al as applied to claim 19 above, and further in view of Hawley (Condensed Chemical Dictionary).

The modified cable of Bleich et al. discloses the central core being formed of a solid polymer. The modified cable of Bleich et al. does not disclose the core being formed of fluoropolymer or a fire resistant plastic. Hawley discloses fluoropolymer being a known material for being used in wire and cable insulation and being a noncombustible (fire resistant) material. Therefore, it would have been obvious to one skilled in the art to use fluoropolymer for the modified central

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core of Bleich et al. since fluoropolymer is a noncombustible material as taught by Hawley.

# Allowable Subject Matter

- 4. Claims 21, 26 and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 5. The following is a statement of reasons for the indication of allowable subject matter: there is no motivation to modify the central core of Gaeris et al. to have the fins with substantially parallel sides (re claim 21).

# Response to Arguments

6. Applicant's arguments with respect to claim 19 have been considered but are moot in view of the new ground(s) of rejection.

### Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 308-0693. The examiner can normally be reached on Mon-Fri.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308 3682. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308 3431 for regular communications and (703) 305 1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Chau N Nguyen
Primary Examiner

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CN June 1, 2002